

## LINKING THE TRANSPORTATION PLANNING AND NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) PROCESSES

For 40 years, Congress has directed that Federally-funded highway and transit projects must flow from metropolitan and statewide transportation planning processes (pursuant to 23 U.S.C. 134-135 and 49 U.S.C. 5303-5306). Over the years, Congress has refined and strengthened the planning process as the foundation for project decisions, emphasizing public involvement, consideration of environment and other factors, and a Federal role that oversees the transportation planning process but does not second-guess the content of transportation plans and programs.

Despite this statutory emphasis on transportation planning, the environmental analyses produced to meet the requirements of the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4231 *et seq.*) have often been conducted *de novo*, disconnected from the analyses used to develop long-range transportation plans, statewide and metropolitan Transportation Improvement Programs (STIPs/TIPs), planning-level corridor/subarea/feasibility studies, or FTA's planning Alternatives Analyses. When the NEPA and transportation planning processes are not well coordinated, the NEPA process may lead to the development of information during NEPA that is more appropriately developed in the planning process, resulting in duplication of work and delays in transportation improvements.

The purpose of this guidance is to change this culture, by supporting Congressional intent that statewide and metropolitan transportation planning should be the foundation for highway and transit project decisions. **This guidance was crafted to recognize that transportation planning processes vary across the country. This document provides guidance and information (both conceptually and through some illustrative "current practice" examples) on how information, analysis, and products from transportation planning can be incorporated into and relied upon in NEPA documents under existing laws.**

The guidance below is intended for use by State Departments of Transportation (State DOTs), metropolitan planning organizations (MPOs), and transit agencies to clarify the circumstances under which transportation planning level choices and analyses can be adopted or incorporated into the process required by NEPA. **Additionally, FHWA and FTA will work with Federal environmental, regulatory, and resource agencies to incorporate the principles of this guidance in their day-to-day NEPA policies and procedures related to their involvement in highway and transit projects.**

This guidance **does not** extend NEPA requirements to transportation plans and programs. The Transportation Efficiency Act for the 21<sup>st</sup> Century (TEA-21) specifically exempted transportation plans and programs from NEPA review, as reflected under 23 U.S.C. 134(o), 23 U.S.C. 135 (i), and 49 U.S.C. 5305(h). Therefore, initiating the NEPA process as part of, or concurrently with, a transportation planning study does not subject transportation plans and programs to NEPA.

**Implementation of this guidance by States, MPOs, and transit agencies is voluntary.** The degree to which studies, analyses, or conclusions from the transportation planning process can be

incorporated into the project development/NEPA processes will depend upon how well they meet certain standards established by NEPA regulations and guidance. While some transportation planning processes already meet these standards, others will need some modification.

The remainder of this guidance document utilizes a “Question and Answer” format, organized into three primary categories (“Procedural Guidance,” “Substantive Guidance,” and “Administrative Issues”).

## I. PROCEDURAL GUIDANCE

### *1. How can the products from the transportation planning process be better incorporated into the project development/NEPA process?*

The transportation planning process and the environmental analysis required during project development by NEPA should work in tandem, with the results of the transportation planning process informing the NEPA process.

Under the FHWA/FTA transportation planning regulations (23 CFR 450.322(b)(6)), metropolitan long-range transportation plans must:

*“include design concept and scope descriptions of all existing and proposed transportation facilities in sufficient detail, regardless of the source of funding, in [air quality] nonattainment and maintenance areas to permit conformity determinations under the U. S. Environmental Protection Agency’s (EPA’s) transportation conformity regulations (40 CFR Part 51). In all [metropolitan] areas, all proposed improvements shall be described in sufficient detail to develop cost estimates.”*

Similarly for STIPs/TIPs, 23 CFR 450.216(a)(8) and 23 CFR 450.324(g)(1), respectively, require that the STIP/TIP contain *“sufficient descriptive material (i.e., type of work, termini, and length) to identify the project or phase.”* In addition, 23 CFR 450.324(h) requires that *“In nonattainment and maintenance areas, projects included shall be specified in sufficient detail (design concept and scope) to permit air quality analysis in accordance with EPA’s transportation conformity regulations (40 CFR Part 51).”*

In each case, project “design concept and scope” includes:

- ❑ mode (e.g., unrestricted highway, high occupancy vehicle facilities, light rail, commuter rail, busway, and combinations of modes);
- ❑ termini, approximate length, and general alignment;
- ❑ number of lanes or tracks; and
- ❑ degree of grade separation and access control.

This planning-level information, and the accompanying analysis and public involvement, establishes the foundation for subsequent analysis and decision-making during project development.

**2. *In what format should the planning information be included?***

To be included in the NEPA process, work from the planning process must be documented in a form that can be appended to the NEPA document or incorporated by reference. Documents may be incorporated by reference if they are readily available so as to not impede agency or public review of the action. Any document incorporated by reference must be “reasonably available for inspection by potentially interested persons within the time allowed for comment.” Incorporated materials must be cited in the NEPA document and their contents briefly described, so that the reader understands why the document is cited and knows where to look for further information.

**3. *What is a reasonable level of detail for a planning product that is intended to be used in a NEPA document? How does this level of detail compare to what is considered a full NEPA analysis?***

For purposes of transportation planning alone, a planning-level analysis does not need to rise to the level of detail required in the NEPA process. Rather, it needs to be accurate and up-to-date, and should adequately support the outcome of the long-range transportation plan, in accordance with FHWA/FTA statutory and regulatory requirements on the content and products of statewide and metropolitan transportation planning processes.

However, the Environmental Assessment (EA) or Environmental Impact Statement (EIS) ultimately will be judged by the standards applicable under the NEPA regulations and guidance from the Council on Environmental Quality (CEQ). To the extent the information incorporated from the transportation planning process, standing alone, does not contain all of the information or analysis required by NEPA, then it will need to be supplemented by other information contained in the EIS or EA that would, in conjunction with the information from the plan, collectively meet the requirements of NEPA. **The intent is not to require NEPA studies in the transportation planning process.** As an option, NEPA analyses prepared for project development can be integrated with transportation planning studies (*see the response to Question 10 for additional information*).

**4. *Should Federal, Tribal, State, and local environmental, regulatory, and resource agencies be involved in the transportation planning process in order for planning-level decisions to be more readily accepted in the NEPA process? If so, what type and extent of involvement is needed?***

Yes, FHWA and FTA highly recommend involving Federal environmental, regulatory, and resource agencies in statewide and metropolitan transportation planning. Additionally, current FHWA/FTA requirements ensure that State DOTs and MPOs coordinate with Tribal governments and State and local air quality agencies (in EPA-designated nonattainment and maintenance areas) in the development of transportation

plans and programs. Further participation by Federal, Tribal, State and local environmental, regulatory, and resource agencies during the transportation planning process would be consistent with the cooperative relationship envisioned by statute and reinforced by the courts. However, ultimately the responsibility for local and State transportation planning decisions lie with the State DOTs, MPOs, and transit agencies.

Successful examples of using planning products in NEPA analysis are based on early and continuous involvement of environmental, regulatory, and resource agencies. Without this early coordination, environmental, regulatory, and resource agencies are more likely to expect decisions made or analyses conducted in the transportation planning process to be revisited during the NEPA process. Additionally, encouraging participation early in transportation planning is advisable, since it would give environmental, regulatory, and resource agencies a better insight into the needs and objectives of the locality and also would provide an important opportunity for agency concerns to be identified and addressed early in the process. These concerns could include issues that might be raised by Federal environmental, regulatory, and resource agencies in considering permit applications for projects designed to implement the transportation plan. Additionally, Federal, Tribal, and State and local environmental, regulatory, and resource agencies are able to share data on particular resources, which can play a critical role in determining the feasibility of a transportation solution with respect to environmental impacts. The use of other agency planning outputs can result in a transportation project that could support multiple goals (transportation, environmental, and community). Further, planning decisions by these other agencies may have impacts on long-range transportation plans and/or the STIP/TIP, thereby providing important input to the transportation planning process and advancing integrated decision-making.

Whether or not Federal, Tribal, or State and local environmental, regulatory, and resource agencies participated in the transportation planning process, it is incumbent on Federal lead agencies to identify as early as practicable in the NEPA process those Federal, State, Tribal, and local government agencies that have jurisdiction by law or special expertise with respect to all reasonable alternatives or significant social, environmental, or economic impacts associated with a proposed action that requires NEPA analysis and documentation. The lead Federal agency must invite Federal agencies with jurisdiction by law and should invite the other agencies and governments (as listed above) to be cooperating agencies in the development of the EIS. The lead Federal agency also may request an agency to be a cooperating agency for an EA. As cooperating agencies, these other governmental agencies are afforded an opportunity to participate in the development of the NEPA analysis and documentation (including the review of any incorporated transportation planning products) in addition to their role as members of the public in commenting on the NEPA analysis and documentation. In summary, full engagement of environmental, regulatory, and resource agencies in relevant planning studies is desirable; however, if these agencies choose not to participate or participate only sporadically, the planning products can still be used in the EA or EIS by incorporating them by reference. *See response to Question 7 for additional elements to consider with respect to acceptance of planning products for NEPA documentation.*

**5. *What is the procedure for using decisions or analyses from the transportation planning process?***

FHWA and FTA, as the lead Federal agencies, will have the final say on what processes and consultation techniques are used to determine the transportation planning products that will be incorporated into the NEPA process. At a minimum, a robust scoping/early coordination process (which explains to Federal and State environmental, regulatory, and resource agencies and the public the information and/or analyses utilized to develop the planning products, how the purpose and need was developed and refined, and how the design concept and scope were determined) should play a critical role in leading to informed FHWA/FTA decisions on the suitability of the transportation planning information, analyses, documents, and decisions for use in the NEPA process. As part of a rigorous scoping/early coordination process, FHWA and FTA should ensure that the transportation planning results are appropriately documented, shared, and used.

**6. *To what extent can FHWA/FTA provide up-front assurance that decisions and additional investments made in the transportation planning process will pay off, allowing planning-level decisions and analyses be used in the NEPA process?***

There are no guarantees. However, the potential pay-off is greatly improved for transportation planning processes that address the “3-C” planning principles (comprehensive, cooperative, and continuous); incorporate the intent of NEPA through the consideration of natural, physical, and social effects; involve environmental, regulatory, and resource agencies; thoroughly document the transportation planning process information, analysis, and decision; and vet the planning results through the applicable public involvement processes.

**7. *What considerations will FHWA/FTA take into account in their review of planning products for acceptance in project development/NEPA?***

FHWA/FTA will give deference to decisions resulting from the transportation planning process if FHWA/FTA determine that the planning process is consistent with the “3-C” planning principles **and** when the planning study process, alternatives considered, and resulting decisions have a rational basis that is thoroughly documented and vetted through the applicable public involvement processes. Moreover, any applicable program-specific requirements (e.g., the Congestion Mitigation and Air Quality Improvement Program or the FTA New Starts Program) also must be met.

Because of our obligations under NEPA, FHWA/FTA must be able to stand behind the overall soundness and credibility of analyses conducted and decisions made during the transportation planning process if they are incorporated into a NEPA document. For example, if systems-level or other broad objectives or choices from the transportation plan are incorporated into the purpose and need statement for a NEPA document, FHWA and FTA should not revisit whether these are the best objectives or choices among other options. Rather, FHWA and FTA review would include making sure that objectives or choices derived from the transportation plan were: based on transportation planning factors established by Federal law; reflect a credible and articulated planning rationale; founded on reliable data; and developed through transportation planning processes

meeting FHWA and FTA statutory and regulatory requirements. In addition, the basis for the goals and choices must be documented and included in the NEPA document. FHWA/FTA reviewers do not need to review whether assumptions or analytical methods used in the studies are the best available, but, instead, need to assure that such assumptions or analytical methods are reasonable and scientifically acceptable. This review would include determining whether: (a) assumptions have a rational basis and are up-to-date and (b) data, analytical methods, and modeling techniques are reliable, defensible, reasonably current, and meet data quality requirements.

## II. SUBSTANTIVE GUIDANCE

### General Issues to be Considered:

#### 8. *What should be considered in order to rely upon transportation planning studies in NEPA?*

The following questions should be answered prior to accepting studies conducted during the transportation planning process for use in NEPA. While not a “checklist,” these questions are intended to guide the practitioner’s analysis of the planning products:

- How much time has passed since the planning studies and corresponding decisions were made?
- Is the information still relevant/valid?
- What changes have occurred in the area since the study was completed?
- Is the information in a format that can be appended to an environmental document or reformatted to do so?
- Are the analyses in a planning-level report or document based on data, analytical methods, and modeling techniques that are reliable and defensible?
- Were FHWA/FTA, other agencies, and the public involved in the relevant planning analysis and the corresponding planning decisions?
- Were the planning products available to other agencies at NEPA scoping?
- At NEPA scoping, was a clear connection between the decisions made in planning and those to be made during the project development stage explained to the public and others? What was the response?
- Are natural resource and land use plans being informed by transportation planning products, and vice versa?

## Purpose and Need:

### *9. How can transportation planning be used to shape a project's purpose and need in the NEPA process?*

A sound transportation planning process is the primary source of the project purpose and need. Through transportation planning, State and local governments, with involvement of stakeholders and the public, establish a vision for the region's future transportation system, define transportation goals and objectives for realizing that vision, decide which needs to address, and determine the timeframe for addressing these issues. The transportation planning process also provides a potential forum to define a project's purpose and need by framing the scope of the problem to be addressed by a proposed project. This scope may be further refined during the transportation planning process as more information about the transportation need is collected and consultation with the public and other stakeholders clarifies other issues and goals for the region.

The transportation planning process can be utilized to develop the purpose and need in the following ways:

- (a) goals and objectives from the transportation planning process may be part of the project's purpose and need statement;
- (b) a general travel corridor or general mode or modes (i.e., highway, transit, or a highway/transit combination) resulting from planning analyses may be part of the project's purpose and need statement;
- (c) if the financial plan for an MPO's long-range transportation plan indicates that funding for a specific project will require special funding sources (e.g., tolls or public-private financing), such information may be included in the purpose and need statement; or
- (d) the results of analyses from management systems (e.g., congestion, pavement, bridge, and/or safety) may shape the purpose and need statement.

The use of these planning-level goals and choices must be appropriately explained in the NEPA document.

**Consistent with NEPA, the purpose and need statement should be a statement of a transportation problem, not a specific solution.** However, the purpose and need statement should be specific enough to generate alternatives that may potentially yield real solutions to the problem at-hand. A purpose and need statement that yields only one alternative may indicate a purpose and need that is too narrowly defined.

The Maine Department of Transportation's Integrated Transportation Decision-Making Process consists of 10 steps (planning through project implementation). The first step, the Transportation Planning Process, is intended to enhance transportation planning through better communication and coordination among Federal, State and local planning, environmental, regulatory, and resource, and transportation agencies (including MPOs),

and the public. Early coordination and information sharing between the agencies provide opportunities to develop better projects, while addressing environmental and community concerns, and reducing project delays. This step also provides the opportunity to balance the purpose and need for transportation improvements with the potential impacts to the community and the environment early in the decision-making process, and allows for consistency between transportation and land use policies. This process step is expected to reduce delays by allowing agencies the ability to make informed decisions earlier in the project development process. Additional information on this example may be obtained at: <http://environment.fhwa.dot.gov/strmlng/itdstat.htm>.

Short of a fully integrated transportation decision-making process similar to that described above, many State DOTs develop information for their purpose and need statements when implementing interagency NEPA/Section 404 process merger agreements. These agreements may need to be expanded to include commitments to share and utilize transportation planning products when developing a project's purpose and need.

***10. Under what conditions can the NEPA process be initiated in conjunction with transportation planning studies?***

The NEPA process may be initiated in conjunction with transportation planning studies in a number of ways. A common method is the "tiered EIS," in which general travel corridors, modes, and/or packages of projects are evaluated at a planning level of detail, leading to the refinement of purpose and need and, ideally, selection of the design concept and scope for a subsequent project or series of projects. The tiered EIS uses the NEPA process as a tool to involve environmental, regulatory, and resource agencies and the public in these decisions, as well as to ensure the appropriate consideration of environmental factors in these planning-level decisions. Some recent examples of the tiered EIS approach include I-70 in Missouri (see <http://www.improvei70.org/>) and I-405 in Washington State (see [http://www.wsdot.wa.gov/projects/I-405/resource/i405\\_0104\\_ProgRept\\_rev.pdf](http://www.wsdot.wa.gov/projects/I-405/resource/i405_0104_ProgRept_rev.pdf)).

Another method of initiating NEPA in conjunction with transportation planning studies is the use of the EA/Corridor Study concept, as utilized, for example, by the Indiana Department of Transportation (INDOT). This approach is less formal than the tiered EIS, and often can be accomplished in considerably less time and at less expense. Additional information on this example may be obtained at: <http://www.fhwa.dot.gov/indiv/procedur.htm>.

Corridor or subarea analyses/studies are another option when the long-range transportation plan leaves open the possibility of multiple approaches to fulfill its goals and objectives. In such cases, the NEPA process could be initiated in conjunction with a corridor or subarea study. Similarly, some transit agencies developing New Starts projects perform the planning-level Alternatives Analysis required for FTA New Starts within the NEPA process and combine the Alternatives Analysis and the draft NEPA document.



## **Alternatives:**

### ***11. In the context of this guidance, what is the meaning of the term “alternatives?”***

This guidance utilizes the term “alternatives” as specified in NEPA regulations (40 CFR 1502.14), where it is defined in its broadest sense to include everything from major modal alternatives and location alternatives to minor design changes that would mitigate adverse impacts. This guidance does not use the term as it is used in many other contexts (e.g., “prudent and feasible alternatives” under Section 4(f) of the Department of Transportation Act, the “Least Environmentally Damaging Practicable Alternative” under the Clean Water Act, or the “Alternatives Analysis” in FTA’s New Starts statute).

However, as early as possible in the transportation planning stage of any project, a determination should be made as to whether the alternatives to be considered will need to be used to satisfy multiple statutory and regulatory requirements that will be addressed during the subsequent project development process as an integral part of the NEPA process. If so, during transportation planning, the alternatives chosen for consideration and the analysis of those alternatives should reflect the multiple objectives that must be addressed. For example, if a potential project would require a Section 404 permit, ideally there would be coordination with the U. S. Army Corps of Engineers and some level of agreement from them that the alternatives considered are broad enough to allow for the ultimate development of a Least Environmentally Damaging Practicable Alternative. In this case, screening of alternatives for the presence of important wetlands based on geographic information systems (GIS) or other planning-level data sources would be appropriate to support this early determination.

### ***12. Under what circumstances can alternatives be eliminated from detailed consideration during the NEPA process based on information and analysis from the transportation planning process?***

There are two ways in which the transportation planning process can begin limiting the alternative solutions to be evaluated during the NEPA process: (a) shaping the purpose and need for the project or (b) evaluating alternatives during planning studies and eliminating some of the alternatives from detailed study in the NEPA process prior to the start of the project-level NEPA process. Each approach requires careful attention, and is summarized below.

Shaping the Purpose and Need for the Project: The transportation planning process should shape the purpose and need and, thereby, the range of reasonable alternatives. With proper documentation and public involvement, a purpose and need derived from the planning process can legitimately narrow the alternatives analyzed in the NEPA process. *See the response to Question 9 for further discussion on how the planning process can shape the purpose and need used in the NEPA process.*

For example, the purpose and need may be shaped by the transportation planning process in a manner that consequently narrows the range of alternatives that must be considered in detail in the NEPA document when:

1. the transportation planning process has selected a general travel corridor as best addressing identified transportation problems and the rationale for the determination in the planning document is reflected in the purpose and need statement of the subsequent NEPA document;
2. the transportation planning process has selected a general mode (i.e., highway, transit, or a highway/transit combination) that accomplishes its goals and objectives, and these documented determinations are reflected in the purpose and need statement of the subsequent NEPA document; or
3. the transportation planning process determines that the project needs to be funded by tolls or other non-traditional funding sources in order for the long-range transportation plan to be fiscally constrained or identifies goals and objectives that can only be met by toll roads or other non-traditional funding sources, and that determination of those goals and objectives is reflected in the purpose and need statement of the subsequent NEPA document.

Evaluating and Eliminating Alternatives During the Transportation Planning

Process: The evaluation and elimination of alternatives during the transportation planning process can be incorporated by reference into a NEPA document under certain circumstances. In these cases, the planning study becomes part of the NEPA process and provides a basis for screening out alternatives. As with any part of the NEPA process, the alternatives analysis to be incorporated from the process must have a rational basis that has been thoroughly documented (including documentation of the necessary and appropriate vetting through the applicable public involvement processes). This record should be made available for public review during the NEPA scoping process.

*See responses to Questions 5, 6, 7, and 8 for additional elements to consider with respect to acceptance of planning products for NEPA documentation and the response to Question 13 on the information or analysis from the transportation planning process necessary for supporting the elimination of an alternative(s) from detailed consideration in the NEPA process.*

For instance, under FTA's New Starts Program, the alternatives considered in the NEPA process may be narrowed in those instances that the Alternatives Analysis required by 49 U.S.C. 5309(e) is conducted as a planning study prior to the NEPA review. In fact, FTA may be able to narrow the alternatives considered in detail in the NEPA document to the No-Build (No Action) alternative and the "Locally Preferred Alternative." Alternatives must meet the following criteria if they are deemed sufficiently considered by an FTA New Starts Alternatives Analysis conducted prior to NEPA without a programmatic NEPA analysis and documentation:

- ❑ During the planning Alternatives Analysis, all of the reasonable alternatives under consideration must be fully evaluated in terms of their transportation impacts; capital and operating costs; social, economic, and environmental impacts; and technical considerations;
- ❑ There must be appropriate public involvement in the planning Alternatives Analysis;
- ❑ The appropriate Federal, State, and local environmental, regulatory, and resource agencies must be engaged in the planning Alternatives Analysis;
- ❑ The results of the planning Alternatives Analysis must be documented;
- ❑ The NEPA scoping participants must agree on the alternatives that will be considered in the NEPA review; and
- ❑ The subsequent NEPA document must include the evaluation of alternatives from the planning Alternatives Analysis.

The above criteria apply specifically to FTA's New Starts process. However, for other transportation projects, if the planning process has included the analysis and stakeholder involvement that would be undertaken in a first tier NEPA process, then the alternatives screening conducted in the transportation planning process may be incorporated by reference, described, and relied upon in the project-level NEPA document. At that point, the project-level NEPA analysis can focus on the remaining alternatives.

For example, Indiana's Streamlined EIS Procedures established the "one decision-making process" to eliminate the duplication of activities between planning studies and the subsequent environmental analysis carried out under NEPA. This process calls for early and ongoing participation by environmental, regulatory, and resource agencies to help ensure that basic issues regarding purpose and need and alternatives are addressed prior to the preparation of the DEIS. This allows the DEIS process to focus on remaining concerns such as avoidance, minimization, and other forms of mitigation. The procedures also allow the NEPA documents to satisfy permitting requirements including Section 404 and State Construction-in-Floodway permits. For many projects, INDOT and the MPO(s), through the transportation planning process, reach consensus on the need for an improvement, or project, and also agree on the proposed design concept and scope. These are cases in which there is a high level of clarity between INDOT and the MPO(s) about the transportation issue and need, along with a consensus on a limited set of reasonable alternatives. In these cases, the identified design concept and scope is made part of the MPO's long-range transportation plan and INDOT's statewide transportation plan. For other proposed projects in which the need and the design concept and scope are less clear and well-defined, a corridor-level planning study initiated as an EA is conducted. Additional information on this example may be obtained at: <http://www.fhwa.dot.gov/indiv/procedur.htm>.

***13. What information or analysis from the transportation planning process is needed in an EA or EIS to support the elimination of an alternative(s) from detailed consideration?***

The section of the EA or EIS that discusses alternatives considered but eliminated from detailed consideration should:

- (a) identify any alternatives eliminated during the transportation planning process (this could include broad categories of alternatives, as when a long-range transportation plan selects a general travel corridor based on a corridor study, thereby eliminating all alternatives along other alignments);
- (b) briefly summarize the reasons for eliminating the alternative; and
- (c) include a summary of the analysis process that supports the elimination of alternatives (the summary should reference the relevant sections or pages of the analysis or study) and incorporate it by reference or append it to the NEPA document.

Any analyses or studies used to eliminate alternatives from detailed consideration should be made available to the public and affected agencies during the NEPA scoping process and should be reasonably available during comment periods.

Alternatives passed over during the transportation planning process because they are infeasible or do not meet the NEPA “purpose and need” can be omitted from the detailed analysis of alternatives in the NEPA document, as long as the rationale for elimination is explained in the NEPA document. **Alternatives that remain “reasonable” after the planning-level analysis must be addressed in the EIS, even when they clearly are not the preferred alternative.** When the proposed action evaluated in an EA involves unresolved conflicts concerning alternative uses of available resources, NEPA requires that appropriate alternatives be studied, developed, and described.

**Affected Environment and Environmental Consequences:**

***14. What types of planning products provide analysis of the affected environment and environmental consequences that are useful in a project-level NEPA analysis and document?***

The following planning products are valuable inputs to the discussion of the affected environment and environmental consequences (both its current state and future state in the absence of the proposed action) in the project-level NEPA analysis and document:

- ❑ regional development and growth analyses;
- ❑ local land use, growth management, or development plans; and
- ❑ population and employment projections.

The following are types of information, analysis, and other products from the transportation planning process that can be used in the discussion of the affected environment and environmental consequences in an EA or EIS:

- (a) GIS overlays showing the past, current, or predicted future conditions of the natural and built environments;
- (b) environmental scans that identify environmental resources and environmentally sensitive areas;
- (c) descriptions of airsheds and watersheds;
- (d) demographic trends and forecasts;
- (e) projections of future land use, natural resource conservation areas, and development; and
- (f) the outputs of natural resource planning efforts, such as wildlife conservation plans, watershed plans, and multiple species habitat conservation plans.

For example, Florida's Efficient Transportation Decision-Making (ETDM) Process established Environmental Technical Advisory Teams (ETATs) in each of the Florida Department of Transportation's (FDOT's) seven districts to provide for early interagency coordination during planning. Each ETAT is comprised of 12-20 members that represent Federal, State, and local transportation and environmental, regulatory, and resource agencies. ETAT representatives then provide agency responses to the respective transportation planning entity (FDOT and/or the affected MPO(s)). During the early phases of transportation planning, ETAT members serve largely in an advisory role. The NEPA process begins at the Programming Screen with the development of the Advance Notification package by FDOT. ETAT input provides "agency scoping" to help satisfy the requirements of NEPA and other pertinent laws that are addressed during the NEPA process. At the Programming Screen stage, ETAT members are offered the opportunity to accept or comment on the purpose and need statement, update the environmental reviews conducted at the Planning Screen, identify required technical studies, and opt out of further involvement. A key tool is the Environmental Screening Tool, which is an Internet-accessible GIS application that creates linkages between ETAT members and the Florida Geographic Data Library at the University of Florida. Project and environmental resource data are input to a database system. Standardized GIS analyses (as prescribed by each environmental, regulatory, or resource agency) are automatically performed to identify potential impacts to environmental resources. ETAT members need only an Internet connection to view and comment on results. These reports also are available to the public through a read-only website. The database system houses responses from ETAT members as well as FDOT summaries of public comments. Additional information on this example may be obtained at: <http://www.dot.state.fl.us/emo/>.

However, in most cases, the assessment of the affected environment and environmental consequences conducted during the transportation planning process will not be detailed enough to meet NEPA standards and, thus, the inventory and evaluation of affected

resources and the analysis of consequences of the alternatives will need to be supplemented with more refined analysis and possibly site-specific details during the NEPA process.

***15. What information from the transportation planning process is useful in describing a baseline for the NEPA analysis of indirect and cumulative impacts?***

Because the nature of the transportation planning process is to look broadly at future land use, development, population increases, and other growth factors, the planning analysis can provide the basis for the assessment of indirect and cumulative impacts required under NEPA. The consideration in the transportation planning process of development, growth, and consistency with local land use, growth management, or development plans, as well as population and employment projections, provides an overview of the multitude of factors in an area that are creating pressures not only on the transportation system, but on the natural ecosystem and important environmental and community resources. An analysis of all reasonably foreseeable actions in the area also should be a part of the transportation planning process. This planning-level information should be captured and utilized in the analysis of indirect and cumulative impacts during the NEPA process.

To be used in the analysis of indirect and cumulative impacts, such information should:

- (a) be sufficiently detailed that differences in consequences of alternatives can be readily identified;
- (b) be based on current data (e.g., data from the most recent Census) or be updated by additional information;
- (c) be based on reasonable assumptions that are clearly stated; and/or
- (d) rely on analytical methods and modeling techniques that are reliable, defensible, and reasonably current.

For example, the North Front Range (Greeley, Colorado) MPO currently is conducting a pilot project to link the transportation planning and NEPA processes. In addition to development of purpose and need statements for a set of regionally significant projects identified in the MPO's Year 2030 Regional Transportation Plan, this inter-disciplinary group of planners, citizens, and environmental, regulatory, and resource agency representatives will complete a cumulative impacts analysis for the entire region. This analysis is intended to be relied upon for future transportation project NEPA documents.

**Environmental Mitigation:**

***16. How can planning-level efforts best support advanced mitigation, banking, and priorities for environmental mitigation investments?***

A lesson learned from efforts to establish mitigation banks and advance mitigation agreements and alternative mitigation options is the importance of beginning interagency discussions during the transportation planning process. Development pressures, habitat

alteration, complicated real estate transactions, and competition for potential mitigation sites by public and private project proponents can encumber the already difficult task of mitigating for “like” value and function and reinforce the need to examine mitigation strategies as early as possible.

Robust use of remote sensing, GIS, and decision support systems for evaluating conservation strategies are all contributing to the advancement of natural resource and environmental planning. The outputs from environmental planning can now better inform transportation planning processes, including the development of mitigation strategies, so that transportation and conservation goals can be optimally met. For example, long-range transportation plans can be screened to assess the effect of general travel corridors or density, on the viability of sensitive plant and animal species or habitats. This type of screening provides a basis for early collaboration among transportation and environmental staffs, the public, and regulatory agencies to explore areas where impacts must be avoided and identify areas for mitigation investments. This can lead to mitigation strategies that are both more economical and more effective from an environmental stewardship perspective than traditional project-specific mitigation measures.

### III. ADMINISTRATIVE ISSUES

#### *17. Are Federal funds eligible to pay for these additional, or more in depth, environmental studies in transportation planning?*

Yes. For example, the following FHWA and FTA funds may be utilized for conducting environmental studies and analyses within transportation planning:

- FHWA planning and research funds, as defined under 23 CFR Part 420 (e.g., Metropolitan Planning (PL), Statewide Planning and Research (SPR), National Highway System (NHS), Surface Transportation Program (STP), and Minimum Guarantee) and
- FTA planning and research funds (49 U.S.C. 5303 and 49 U.S.C. 5313(b)), urban formula funds (49 U.S.C. 5307), and (in limited circumstances) transit capital investment funds (49 U.S.C. 5309).

The eligible transportation planning-related uses of these funds may include: (a) conducting feasibility or subarea/corridor needs studies and (b) developing system-wide environmental information/inventories (e.g., wetland banking inventories or standards to identify historically significant sites). Particularly in the case of PL and SPR funds, the proposed expenditure must be closely related to the development of transportation plans and programs under 23 U.S.C. 134-135 and 49 U.S.C. 5303-5306.

For FHWA funding programs, once a general travel corridor or specific project has progressed to a point in the preliminary engineering/NEPA phase that clearly extends beyond transportation planning, additional in-depth environmental studies must be

funded through the program category for which the ultimate project qualifies (e.g., NHS, STP, Interstate Maintenance, and/or Bridge), rather than PL or SPR funds.

Another source of funding is FHWA's Transportation Enhancement program, which may be used for activities such as: conducting archeological planning and research; developing inventories such as those for historic bridges and highways, and other surface transportation-related structures; conducting studies to determine the extent of water pollution due to highway runoff; and conducting studies to reduce vehicle-caused wildlife mortality while maintaining habitat connectivity.

FHWA and FTA encourage State DOTs, MPOs, and transit agencies to seek partners for some of these studies from environmental, regulatory, and resource agencies, non-government organizations, and other government and private sector entities with similar data needs, or environmental interests. In some cases, these partners may contribute data and expertise to the studies, as well as funding.

***18. What staffing or organizational arrangements may be helpful in allowing planning products to be accepted in the NEPA process?***

Certain organizational and staffing arrangements may support a more integrated approach to the planning/NEPA decision-making continuum. In many cases, planning organizations do not have environmental expertise on staff or readily accessible. Likewise, the review and regulatory responsibilities of many environmental, regulatory, and resource agencies make involvement in the transportation planning process a challenge for staff resources. These challenges may be partially met by improved use of the outputs of each agency's planning resources and by augmenting their capabilities through greater use of GIS and remote sensing technologies (see <http://www.gis.fhwa.dot.gov/> for additional information on the use of GIS). Sharing databases and the planning products of local land use decision-makers and State and Federal environmental, regulatory, and resource agencies also provide efficiencies in acquiring and sharing the data and information needed for both transportation planning and NEPA work.

Additional opportunities such as shared staff, training across disciplines, and (in some cases) reorganizing to eliminate structural divisions between planning and NEPA practitioners may also need to be considered in order to better integrate NEPA considerations into transportation planning studies. The answers to the following two questions also contain useful information on training and staffing opportunities.

***19. How have environmental, regulatory, and resource agency liaisons (Federally- and State DOT-funded positions) and partnership agreements been used to provide the expertise and interagency participation needed to enhance the consideration of environmental factors in the planning process?***

For several years, States have utilized Federal and State transportation funds to support focused and accelerated project review by a variety of local, State, Tribal, and Federal agencies. While Section 1309(e) of TEA-21 speaks specifically to transportation project streamlining, there are other authorities that have been used to fund positions, such as the



Intergovernmental Cooperation Act (31 U.S.C. 6505). In addition, long-term, on-call consultant contracts can provide backfill support for staff that are detailed to other parts of an agency for temporary assignments. At last count (as of 2003), 246 positions were being funded. Additional information on interagency funding agreements is available at: <http://environment.fhwa.dot.gov/strmlng/igdocs/index.htm>.

Moreover, every State has advanced a variety of stewardship and streamlining initiatives that necessitate early involvement of environmental, regulatory, and resource agencies in the project development process. Such process improvements have: addressed the exchange of data to support avoidance and impact analysis; established formal and informal consultation and review schedules; advanced mitigation strategies; and resulted in a variety of programmatic reviews. Interagency agreements and workplans have evolved to describe performance objectives, as well as specific roles and responsibilities related to new streamlining initiatives. Some States have improved collaboration and efficiency by co-locating environmental, regulatory, and resource and transportation agency staff.

Lessons learned from stewardship and streamlining initiatives indicate a need for greater involvement in the transportation planning process by environmental staffs. For example, in Florida, agreements are utilized for agency liaison participation in the planning-level environmental screening process within Florida's ETDM Process (see <http://fdotenvironmentalstreamlining.urs-tally.com/Library/default.htm>). The Oregon Department of Transportation seeks environmental, regulatory, and resource agency input through promotion of environmental stewardship, agency collaboration, and project scoping associated with Oregon's Collaborative Environmental and Transportation Agreement on Streamlining process (see <http://environment.fhwa.dot.gov/strmlng/newsletters/oct01nl.htm>). The North Carolina Department of Transportation has blended the transportation project development process with the watershed planning process (see <http://www.ncdot.org/secretary/envsteward/performance/integration/>). Additionally, the Texas Department of Transportation has focused liaison efforts on major corridor planning efforts. In each of these cases, the State DOT has taken this step only after concluding that the additional investment in up-front planning and coordination will improve the quality, timeliness, and cost effectiveness of a group of projects.

***20. What training opportunities are available to MPOs, State DOTs, and environmental, regulatory, and resource agencies to assist in their understanding of the transportation planning and NEPA processes?***

Both FHWA and FTA offer a variety of transportation planning, public involvement, and NEPA courses through the National Highway Institute and/or the National Transit Institute. Of particular note is the *Linking Planning and NEPA Workshop*, which provides a forum and facilitated group discussion among and between State DOT; MPO; Federal, Tribal, and State environmental, regulatory, and resource agencies; and FHWA/FTA representatives (at both the executive and program manager levels) to develop a State-specific action plan that will provide for strengthened linkages between the transportation planning and NEPA processes.

Moreover, the U. S. Fish and Wildlife Service offers *Green Infrastructure Workshops* which are focused on integrating planning for natural resources (“green infrastructure”) with the development, economic, and other infrastructure needs of society (“gray infrastructure”).

Robust planning and multi-issue environmental screening requires input from a wide variety of disciplines, including information technology; transportation planning; the NEPA process; and regulatory, permitting, and environmental specialty areas (e.g., noise, air quality, and biology). Senior managers at transportation and partner agencies can arrange a variety of individual training programs to support learning curves and skill development that contribute to a strengthened link of the transportation planning and NEPA processes. Formal and informal mentoring on an intra-agency basis can be arranged. Employee exchanges within and between agencies can be periodically scheduled, and persons involved with professional leadership programs can seek temporary assignments with partner agencies.

Transportation planning and NEPA courses offered by various agencies and private sources have been compiled as part of the Executive Order 13274 (Environmental Stewardship and Transportation Infrastructure Project Reviews) workgroup efforts. This list will be posted at <http://www.fhwa.dot.gov/stewardshipeo/index.htm>.

#### **IV. ADDITIONAL INFORMATION ON THIS TOPIC**

Valuable sources of information are FHWA’s environmental streamlining website (<http://environment.fhwa.dot.gov/strmlng/index.htm>) and FTA’s environmental streamlining website (<http://www.environment.fta.dot.gov>). Another source of information and case studies is NCHRP Report 8-38 (Consideration of Environmental Factors in Transportation Systems Planning), which is available at <http://www4.trb.org/trb/crp.nsf/All+Projects/NCHRP+8-38>. In addition, AASHTO’s Center for Environmental Excellence website is continuously updated with news and links to information of interest to transportation and environmental professionals ([www.transportation.environment.org](http://www.transportation.environment.org)).